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(54) Title: ZINC ALLOY AND PROCESS FOR HOT-DIP GALVANNEALING OF STEEL

(57) Abstract: The present invention relates to a hot-dip coating alloy composition suitable for galvannealing steel sheet. The addition of 0.02 to 0.11 wt. % Cr to the alloy allows for an increased Al content in the bath, while ensuring a sufficient diffusion of Fe into the Zn coating during annealing. This is particularly advantageous for use in coating lines where galvanised and the galvannealed products are manufacturing alternatively. The addition of Cr allows to lower the annealing temperature and to shorten the residence time of the steel in the annealing furnace. Galvannealing dual phase steels, which should be processed at relatively low temperatures, is therefor greatly facilitated.

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